ZHDANOV, Viktor Mikhaylovich; SOLOV'YEV, Vladimir Dmitriyevich; EPSHTEYN, Fedor Grigor'yevich. Prinimali uchastiye: GORBUNOVA, A.S.; FADEYEVA, L.L.; ZAKSTEL'SKAYA, L.Ya.; SACHKOV, V.I., red.; BEL'CHIKOVA, Yu.S., tekhred.

[What we know about influenza] Uchenie o grippe. Moskva, Gos.izd-vo med.lit-ry, 1958. 581 p. (MIRA 13:4)

1. Institut virusologii imeni Ivanovskogo AMN SSSR (for Zhdanov, Solov'yev, Epshteyn). 2. Khar'kovskiy institut vaktsin i syvorotok imeni Mechnikova (for Zhdanov). 3. Moskovskiy institut vaktsin i syvorotok imeni Mechnikova (for Solov'yev).
(INFLUENZA)

GORBUNOVA, A.S.

Relation of influenza virus variability to the development of the pandemic of 1957. Vop.virus 3 no.4:196-201 Jl-Ag '58 (MIRA 11:9)

1. Institut virusologii imeni D.I. Ivanovskogo, Moskva.
(INFLUENZA VIRUSES,
A, variability, relation to world epidemic in 1957, review (Rus))

ZHDANOV, V.M.; GOREUNOVA, A.S.

Resolution of the joint conference of institutes of the Academy of Medicine of the U.S.S.R., September 25-28, 1958. Vop. virus. 4 no.1: 125-127 Ja-F '59. (MIRA 12:4)
(INFLUENZA--CONGRESSES)

GOHBUNOVA, A.S.

A method for producing complement fixation antigens and corresponding antisera from soluble and viral fractions of influenza viruses (F. Lee and W. Henle's technic). Vop. virus. 4 no.1:113-114 Ja-F '59. (MIRA 12:4)

(COMPLEMENT,
fixation, antigens from influenza viruses (Rus))

(INFLUENZA VIRUS,
antigens for complement fixation (Rus))

GORBUNOVA, A.S.

Antigenic relationship of influenza viruses of type A, A1 and A2. Vop.virus. 4 no.4:401-406 Jl-Ag '59. (MIRA 12:12)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.
(INFLUENZA VIRUSES, immunology)

GORBUNOVA, A.

Conference of the Ivanovskii Institute of Virology on "Some results in studying the influenza epidemic of January-February 1959." Vop. virus. 4 no.5:627-629 S-O '59. (MIRA 13:2)
(INFLUENZA)

GORBUNOVA, A.S.; STAKHANOVA, V.M.; LOZHKINA, A.N.; OLLI, V.D.

Comparative effectiveness of the carbon dioxide, Vibrio comma filtrate, and potassium periodate methods of serum treatment in the elimination of nonspecific influenza virus A2 hemagglutination inhibitors. Vop. virus. 4 no.6:750-753 N-D '59. (MIRA 13:3)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva, i Gosudarstvennyy nauchno-issledovatel'skiy institut mikrobiologii i epidemiologii Yugo-Vostoka SSSR, Saratov.
(IMMUNE SERUMS)
(INFLUENZA VIRUSES immunol.)
(HEMAGGLUTINATION)

GORBUNOVA, A.S.; LOZHKINA, A.N.; STAKHANOVA, V.M.; ISACHENKO, V.A.

Etiology of the influenza outbreak of 1959. Vest. AMN SSSR 14 no.10:19-23 '59. (MIRA 13:6)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR.
(INFLUENZA)

GORBUNOVA, A. S.

"On the classification of grippe virusses."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.

GORBUNOVA, A.S., red.; SOKOLOV, M.I., red.; PETERSON, O.P., red.; POGOSKINA, M.V., tekhn. red.

[Manual on the laboratory diagnosis of influenza, parainfluenzal and adenoviral diseases] Rukovodstvo po laboratornoi diagnostike grippa, paragrippoznykh i adenovirusnykh zabolevanii. Moskva, Gos. izd-vo med. lit-ry Medgiz, 1960. 166 p. (MIRA 14:10)
(INFLUENZA) (ADENOVIRUS INFECTIONS)

VISHNEVSKAYA, G.O.; GORBUNOVA, A.S.; ZHELOBENKO, V.A.; FIALKOV, Yu.A.; SHEVCHENKO, O.I.; YAGUPOL'SKIY, L.M.

Synthesis of the preparation bilignost. Med. prom. 14 no.9:25-30 S '60. (MIRA 13:9)

1. Kiyevskiy khimiko-farmatsevticheskiy zavod im. M.V. Lomonosova.
(ADIPIC ACID)

GORBUNOVA, A.S.

Influenza and influenzal diseases. Sov.med. 24 no.6:3-9 Je '60. (MIRA 13:9)
(INFLUENZA)

GORBUNOVA, A.S.

Data from a study of the etiology of influenze A2 (1959 epidemic). Vop. virus. 5 no. 6:643-648 N-D '60. (MIRA 14:4)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.
(INFLUENZA)

GORBUNOVA, A.S.

"Laws governing the Variability of influenza virus."

Report submit ed for the 1st Intl. Congress on Respiratory Tract Diseases of Virus and Rickettsial Orgin. Prague, Czech. 23-27 May 1961

KHOU YUN'-DE [Hou Yun-tien]; GORBUNOVA, A.S.

Latent infection caused bu Sendai parainfluenza virus in laboratory animals. Report No.1: Isolation of Sendai virus from the lungs of white mice in the process of adaptation of A2/59 influenza virus to mice. Vop. virus 6 no.4:473-479 Jl-Ag '61. (MIRA 14:11)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva.
(INFLUENZA)

GORBUNOVA, A.S.

Inter-institute conference on influenza. Vop. virus. 6 no.5:634-635 S-O '61. (MIRA 15:1)
(INFLUENZA)

KHOU YUN'-DE [Hou Yün-tê]; GORBUNOVA, A.S.

Antigenic structure of 24 strains of parainfluenza virus type I Sendai. Vop. virus. 6 no.6:691-697 N-D '61. (MIRA 15:2)

1. Laboratoriya etiologii i diagnostiki grippa Irkutsa virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva.
(INFLUENZA--MICROBIOLOGY) (ANTIGENS AND ANTIBODIES)

GORBUNOVA, A.S.; KHOU YUN'-DE [Hou Yün-tê]

Specific thermolabile antihemagglutinins in the serum of mice infected with parainfluenza virus, type I (Sendai). Vop.virus. 7 no.3:327-333 My-Je '61. (MIRA 14:7)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva.
(INFLUENZA) (BLOOD--AGGLUTINATION)

GORBUNOVA, A. S.

On the question of the variability of influenza virus. J. hyg. epidem. 6 no.2:151-153 '62.

1. Ivanovsky Institute of Virology, Academy of Medical Sciences of U.S.S.R., Moscow.

(INFLUENZA VIRUSES)

HO YUN-DE; GORBUNOVA, A.S.

Investigations into syncytium formation in cultures of stable cell lines infected with parainfluenza L virus. I. Comparison of the syncytium forming ability of the Vladivostok and Japanese variants of virus and some other factors related to this phenomenon. Acta virol. 6 no.3:193-201 My '62.

1. Ivanovsky Institute of Virology, U.S.S.R. Academy of Medical Sciences, Moscow.
(VIRUSES culture) (TISSUE CULTURE)

BUKRINSKAYA, A. G.; HO YUN-DE; GORBUNOVA, A. S.

Further investigations on the antigenic relationships between type 2 haemadsorption (Ha-2) and Sendai viruses. Acta virol. (Praha)[Eng] 6 no.4:352-356 Jl '62.

1. Ivanovsky Institute of Virology, U.S.S.R. Academy of Medical Sciences, Moscow.

(VIRUSES immunol) (ANTIGENS)

KHOU YUN'-DE [Hou Yün-tê]; GORBUNOVA, A.S.

Latent infection caused by para-influenza virus Sendai in laboratory animals. Report No.2: Experimental latent infection in mice. Vop. virus 7 no.1:111-115 Ja-F '62. (MIRA 15:3)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.

(INFLUENZA)

GORBUNOVA, A.S.; HO YUN-DE; YERSHOV, F.I.

Investigations into syncytium formation in cultures of stable cell lines infected with parainfluenza 1 virus. III. Characteristics of syncytia formed during passaging of virus carrier cells. Acta virol. 7 no.4:308-315 Jl '63.

1. Ivanovsky Institute of Virology, U.S.S.R. Academy of Medical Sciences, Moscow.
(PARA-INFLUENZA VIRUSES) (TISSUE CULTURE)
(CYTOLOGY) (PATHOLOGY) (HEMAGGLUTINATION)
(COMPLEMENT FIXATION TESTS) (PRECIPITIN TESTS)
(GEL DIFFUSION TESTS)

YERSHOV, F.I.; HO YUN-DE; GORBUNOVA, A.S.

Investigations into syncytium formation in cultures of stable cell lines infected with parainfluenza 1 virus. IV. Cytochemical studies on the formation of A and B type synctia. Acta virol. 7 no.4:316-321 Jl '63.

1. Ivanovsky Institute of Virology, U.S.S.R. Academy of Medical Sciences, Moscow.
(PARA-INFLUENZA VIRUSES) (CYTOLOGY) (CHEMISTRY)
(TISSUE CULTURE) (MICROSCOPY, FLUORESCENCE)
(STAINS AND STAINING) (FLUORESCENT ANTIBODY TECHNIQ)

MITCHENKO, V.P.; GORBUNOVA, A.S.

Mechanism of the interaction of influenza virus with susceptible tissues. Report no.2: Nonspecific inhibitos of influenza virus in secretions of the mucous membranes of the respiratory tract of different animal specie and their significance for the adsorption of the virus on susceptible cells. Vop. virus 8 no.1:44-48 Ja-F'63. (MIRA 16:6)

1. Institut infektsionnykh bolezney AMN SSSR, Kiyev, i Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva.
(INFLUENZA VIRUSES) (RESPIRATORY ORGANS)
(BLOOD—AGGLUTINATION)

GORBUNOVA, Anna Sergeyevna; KOU YUN'-DE [Hou Yun-Tieh] ; YERSHOV, F.I., red.; MIRONOVA, A.M., tekhn. red.

[Sendai virus, the pathogen of influenzalike diseases in man and animals] Virus Sendai-vozbuditel' grippopodobnykh zabolevanii cheloveka i zhivotnykh. Moskva, Izd-vo "Meditsina," 1964. 194 p. (MIRA 17:3)

GORBUNOVA, A.S., doktor med. nauk, prof.

Influenza viruses. Virusy i virus. zabol. no.1:43-63 '64.
(MIRA 18:2)

IRZHANOV, S.D.; GORBUNOVA, A.S.

Nature of the multiplication of A2 and B influenza viruses in monolayer culture of guinea pig embryonic kidneys. Vop. virus 9 no.4:429-434 Jl-Ag '64. (MIRA 18:7)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.

SELIVANOV, Ya.M.; MEN'SHIKH, L.K., TIKHONENKO, T.I.; GORBUNOVA, A.S.; SOKOLOV, M.I.

Purification and fractionation of influenza virus by chromatography on aminoethylcellulose. Vop. virus. 9 no.5:550-555 S-O '64. (MIRA 18:6)

1. Institut virusologii imeni Ivanovskogo AMN SSSR, Moskva.

ISACHENKO, V.A.; SMIRNOVA, G.A.; GORBUNOVA, A.S.

Isolation of an inhibitor-sensitive variation from an inhibitor-resistant culture of A2 influenza virus by gel filtration on sephadex. Vop. virus. 10 no.1:97-99 Ja-F '65.

(MIRA 18:5)

1. Institut virusologii imeni Ivanovskogo AMN SSSR, Moskva.

MEN'SHIKH, L.K.; SELIVANOV, Ya.M.; TIKHONENKO, T.I.; SOKOLOV, M.I.; GORBUNOVA, A.B.; ZHDANOV, V.M.

Use of ion-exchange chromatography for preparative production of purified influenza virus. Vop. virus. 10 no.3:302-307 My-Je '65. (MIRA 18:7)

1. Institut virusologii imeni Ivanovskogo AMN SSSR, Moskva.

ACC NR: AP6028726 (N) SOURCE CODE: UR/0402/66/000/004/0431/0435

AUTHOR: Sokovykh, L. I.; Gorbunova, A. S.

ORG: Virology Institute im. D. I. Ivanovskiy, AMN SSSR, Moscow (Institut virusologii AMN SSSR)

TITLE: Passive hemagglutination test. A special soluble influenza virus antigen which sensitizes red cells

SOURCE: Voprosy virusologii, no. 4, 1966, 431-435

TOPIC TAGS: virus, virus disease, influenza, virus antigen, passive hemagglutination reaction, antigen

ABSTRACT: The activity of four influenza virus (type A, strain PR8) antigens, V- and S-antigens, purified virus and destroyed virus, was determined by complement-fixation and passive-hemagglutination tests. Only the destroyed virus was active in passive hemagglutination, indicating that the sensitizing antigen is released from influenza virus particles after they have been destroyed by ether. This soluble influenza virus antigen — called sensibilizin — can sensitize tannin-treated erythrocytes to agglutination by immune influenza sera. S-antigen does not so sensitize tannin-treated erythrocytes, although it is adsorbed by them. Immune influenza

UDC: 616.921.5-07:616.15-097.34

Card 1/2

Card 2/2

VOLKOVA, M.A.; DRITS, F.A.; MISHINA, R.G.; GORBUNOVA, A.Ya.; KRAL'KO, Ye.A.

Dispensary examination without restriction for the detection of pulmonary tuberculosis. Prob. tub. no.1: 10-14 '63.
(MIRA 16:5)

1. Iz Irkutskogo oblastnogo protivotuberkuleznogo dispansera (glavnyy vrach - dotsent M.A. Volkova).
(TUBERCULOSIS-PREVENTION)

GORBUNOVA, D.I., inzh.; FRADKIN, F.R., inzh.

Signalization system using telephone communication lines.
Mekh. i avtom. proizv. 18 no.4:47-48 Ap'64. (MIRA 17:5)

BELOVA, Z.; GORBUNOVA, E.

Uniform list of workers' occupations. Sots. trud 6 no.7:60-63 Jl '61. (MIRA 16:7)

(Occupations—Classification)

GORBUNOVA, Eleonora [Harbunova, Eleanora]

Artificial kidney. Rab. i sial. 39 no.9:22 S '63.
(MIRA 16:11)

GORBUNOVA, E.I.

110

PHASE I BOOK EXPLOITATION SOV/6181

Ural'skoye soveshchaniye po spektroskopii. 3d, Sverdlovsk, 1960. Materialy (Materials of the Third Ural Conference on Spectroscopy) Sverdlovsk, Metallurgizdat, 1962. 197 p. Errata slip inserted. 3000 copies printed.

Sponsoring Agencies: Institut fiziki metallov Akademii nauk SSSR. Komissiya po spektroskopii; and Ural'skiy dom tekhniki VSNTO.

Eds. (Title page): G. P. Skornyakov, A. B. Shayevich, and S. G. Bogomolov; Ed.: Gennadiy Pavlovich Skornyakov; Ed. of Publishing House: M. L. Kryzhova; Tech. Ed.: N. T. Mal'kova.

PURPOSE: The book, a collection of articles, is intended for staff members of spectral analysis laboratories in industry and scientific research organizations, as well as for students of related disciplines and for technologists utilizing analytical results.

Card 1/15

Materials of the Third Ural Conference (Cont.) SOV/6181

COVERAGE: The collection presents theoretical and practical problems of the application of atomic and molecular spectral analysis in controlling the chemical composition of various materials in ferrous and nonferrous metallurgy, geology, chemical industry, and medicine. The authors express their thanks to G. V. Chentsova for help in preparing the materials for the press. References follow the individual articles.

TABLE OF CONTENTS:

PART II

KOLPAKOV, Yu.D.; SKRIPOV, V.P.; GORBUNOVA, E.N.

Scattering of light in carbonic acid and its relation to the equation of state. Ukr.fiz.zhur. 7 no.7:787-792 Jl '62. (MIRA 12:15)

1. Ural'skiy politekhnicheskiy institut i Ural'skiy filial AN SSSR, g. Sverdlovsk.
(Light—Scattering) (Carbonic acid) (Equation of state)

GORBUNOVA, F.Z.

Using slag and pyrite cinders in the building materials industry. Nauch. trudy PermNIUI no.5:134-143 '63.
(MIRA 18:3)

ACC NR: AP7003008 SOURCE CODE: UR/0413/66/000/024/0156/0156

INVENTORS: Tolchinskiy, Ye. M.; Lebedev, A. V.; Gorbunova, G. I.; Dobrov, N. A.; Gusel'nikova, M. V.; Zagryadskiy, A. I.; Zazulin, V. A.; Podol'skaya, G. V.

ORG: none

TITLE: An automatic measuring and recording device "ERA". Class 42, No. 165597

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 24, 1966, 156

TOPIC TAGS: measuring instrument, transistor, analog digital converter, logic element

ABSTRACT: This Author Certificate presents an automatic measuring and recording device "Era." The device contains a group relay commutator of the meters, grouped measuring amplifiers, an analog-digital converter with a zero-organ and a generator of stage voltages, and a directing unit. To connect a desired group to the analog-digital converter and to measure voltages of alternating signs, a logic commutator is connected to the outputs of the measuring amplifiers. This commutator contains transistor switches, the number of which is equal to twice the number of amplifiers. These switches are connected to the group counter and to the sign trigger. The input of the unity position of this trigger is connected to the directing unit, and the input of the zero position is connected with the output of the zero organ.

SUB CODE: 09/ SUBM DATE: 11Jul63

Card 1/1 UDC: 681.178.9

TITOVA, A.I., professor; GORBUNOVA, G.M.

Primary symptomatology and early diagnosis of acute poliomyelitis. Pediatriia no.3:23-26 My-Je '55 (MLRA 8:10)

1. Iz kafedry i kliniki (zav.prof. A.I.Titova) detskikh bolezney Yaroslavskogo meditsinskogo instituta.
(POLIOMYELITIS, diag.
early diag.)

BELOVASHINA, N.M.; GORBUNOVA, G.S.

Some evolutionary views of M.V.Lomonosov. Dokl. na nauch. konf. 1 no.4:29-33 '62. (MIRA 16:8)
(Lomonosov, Mikhail Vasil'evich, 1711-1765) (Evolution)

SOKOLOVA, N. S.

Dissertation: "The Change in Photosynthesis and Certain Other Physiological Processes During the Ontogenesis of a Plant in Connection with Various Environmental Conditions." Cand Biol Sci, Inst of Botany imeni V. L. Komarov, Acad Sci USSR, Moscow, Oct-Dec 53. (Vestnik Akademii Nauk, Moscow, Jun 54)

SO: SUM 318, 23 Dec 1954

GORBUNOVA, G.S.

BRILLIANT, V.A.[deceased]; GORBUNOVA, G.S.

Ecological and physiological trend in the study of photosynthesis and its productivity. Trudy Inst.fiziol.rast. 10:139-149 '55. (MLRA 8:9)

1. Botanicheskiy institut im. V.L. Komarova Akademii nauk SSSR.
(Photosynthesis)

GORBUNOVA, G.S.

Changes in photosynthesis and some other physiological processes during the ontogenic development of plants in connection with different environmental conditions. Trudy Bot.inst.Ser.4 no.11: 165-207 '56. (MLRA 9:9)
(Photosynthesis) (Ontogeny (Botany))

DADYKIN, V.P.; GORBUNOVA, G.S.

Improving the method of "isolated temperatures." Bot.zhur.41 no.6: 858-861 Je '56. (MLRA 9:10)

1.Yakutskiy filial Akademii nauk SSSR.
(Plants, Effect of temperature on) (Plants--Nutrition)

GORBUNOVA, G. S.

I-1

USSR/Plant Physiology - Photosynthesis.

Abs Jour : Ref Zhur - Biol., No 5, 1958, 19911

Author : Gorbunova, G.S.
Inst : -
Title : On the Question of Plant Photosynthesis under Conditions of Central Yakutia.

Orig Pub : Izv. vost. fil. AN USSR, 1957, No 1, 121-129

Abstract : From the 20th of June to the 10th of July, the 24 hour course of assimilation (determined by the Saks modified method of halves) by Birch (Betula platyphylla) and wild rose (Rosa acicularis) had two maximums - in the morning and in the evening; at night accumulation proceeded at a slower tempo. In a monotypical course of curves the predominance of discharge over accumulation of material, and the absence of assimilation from midnight to 3 o'clock in the morning was observed in the Northern rose potato during the periods of blossoming

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M

USSR/Cultivated Plants - Grains

Abs Jour : Ref Zhur Biol., No 18, 1958, 82257

Author : Dadykin, V.P., Gorbunova, G.S.
Inst : -
Title : Discussion of the Article, "Effect of Slight Variations in Soil Temperature on the Development and Yield of Grain Crops" by D.V. Ippolitov, F.Ye. Kolyasev

Orig Pub : Botan. zh., 1957, 42, No 3, 475-479

Abstract : The high indices of differences in the development of plants, cited in the F.Ye. Kolyasev and D.V. Ippolitov article (Bot. Zh. 5, 1956), arising allegedly as the result of a one-degree difference in soil temperature, are subjected to serious doubt in the review. The authors of the review compare the D.V. Ippolitov and F.Ye. Kolyasev data with similar data of their own experiments for the past three years, and also with information available in the literature, and come to a conclusion

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20-1-52/54

AUTHOR DADYKIN, V.P., STANKO, S.A., GORBUNOVA, G.S., and IGUMNOVA, Z.S.

TITLE Light Assimilation by Plants at Yakutsk and Tiksi (Ob usvoyenii sveta rasteniyami v Yakutske i Tiksi. Russian)

PERIODICAL Doklady Akademii Nauk SSSR, 1957, Vol 115, Nr 1 , pp 190-192 (U.S.S.R.)

ABSTRACT The idea of "optic assimilation" of plants of K.A. Timiryazev which was proved and developed especially by austrobotany, served as a starting point for the organization and realization of the research work on the optic characteristics of plants growing under different temperature conditions of air and soil. The experimental areas were at Yakutsk (62° North lat.) and Tixi (71,6° North lat.). The weather conditions are mentioned in table 1. The optical characteristics of the plants were found by means of the method of relative spectrophotometry using a quartz-spectrograph (Tikhov) with a resolving power of 1 : 2o and a linear dispersion in the area of K and H of 11,3 M/mm. The spectrographic work was carried out under natural conditions of growth with cloudless sky, at the moment of the highest position of the sun and with the exposure of 1o seconds. Fig. 1 shows all 3 reflection-, penetration- and absorption curves of solar energy through radies plants. The reflection curve at Yakutsk is higher than that of Tiksi. The energy reflection here is higher because of more favourable temperature conditions. An exception is formed by a narrow band of the

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Light Assimilation by Plants at Yakutsk and Tiksi

spectrum in the λ 660 μ m zone where the reflection magnitude of Tiksi is greater than that of Yakutsk. Also the penetration curve through the leaves is in almost any part higher than that of Tixi. The greatest difference is to be found in the section of long ultraviolet, green, yellow and orangecolored rays. An exception is the narrow band of red rays (650 - 660 μ m) where the penetration in Tixi was greater than that of Yakutsk. The most interesting picture is demonstrated in the case of a comparison of the absorption of radiation energy. Almost over the whole wavediapason the plants of Yakutsk absorb remarkably less solar energy than those of Tiksi. The latter absorb 70 - 80 $^0/_0$ even in the green part of the spectrum. The red-orange-yellow part is absorbed up to from 80 - 90 $^0/_0$. Especially significant is the absorption of the far red rays and of near infrared radiation which is classified as abiotic. Most essential seems the remarkably greater total absorption of solar ray energy by the plants of Tixi compared with those of Yakutsk. It proves a better utilization by plants growing under hard temperature conditions of air and soil. It seems probable that the reformation of bio-chemical processes in the internal part of the plants occurring under the influence of low outer temperature and accompanied by a change of the

Light Assimilation by Plants at Yakutsk and Tiksi

pigment apparatus makes a complete utilization of solar energy possible. It may be that it is just this energy of the plants that makes possible thewater absorption together with nutrition from a soil with very low temperature. Also the assimilation activity of the same plants was found. The daily production of dry substance was 1,5 times greater in the case of the Tixi plants than in the case of Yakutsk plants. Goncharik calls this "intensity of light nutrition" in the case of potatoes and cabbage. The spectrographic method made possible to interpret this intensity and to determine a complete utilization of sun rays by the plants of the high North, among it of the infrared part. (1 illustration, 2 tables and 5 Slavic references).

ASSOCIATION Yakutsk Branch of the Academy of Sciences of the U.S.S.R. (Yakutskiy filial Akademii nauk SSSR)
PRESENTED BY KURSANOV, A.L., **Academician, April 29, 1957**
SUBMITTED 10.12.1956
AVAILABLE Library of Congress

GORBUNOVA, G.S.; PARSHINA, Z.S.; BEDENKO, V.P.

Optical properties and photosynthesis of some cultivated and wild plants as related to ecological conditions. Trudy Sekt. astrobot. AN Kazakh. SSR 8:31-45 '60. (MIRA 13:12)
(Plants--Optical properties)
(Photosynthesis)

GORBUNOVA, K.A.

Analyzing the formation of karst breccia in the eastern wing of the Ufa Upland from the hydrogeological viewpoint. Izv. vys. ucheb. zav.; geol. i razved. 3 no. 10:89-92 O '60.
(MIRA 13:12)

1. Permskiy gosudarstvennyy universitet imeni A.M. Gor'kogo.
(Ufa Upland--Breccia)

GORBUNOVA, G.S.; KORCHINSKAYA, Ye.I.

Using potassium ammonium phosphate, a new chlorine-free fertilizer, on loamy Solonchak soils in central Yakutia. Nauch. soob. IAFAN SSSR no.3:71-78 '60. (MIRA 16:3)
(Yakutia--Fertilizers and manures)
(Yakutia--Solonchak soils)

GORBUNOVA, I. G.

KUCHEROV, N.V

PHASE I BOOK EXPLOITATION SOV/1733

Leningrad. Glavnaya geofizicheskaya observatoriya

Voprosy fiziki prizemnogo sloya vozdukha (Problems in the Physics of the Near-Surface Air Layer) Leningrad, Gidrometeoizdat, 1958, 188 p. (Series: Its: Trudy, vyp. 77) 1,500 copies printed.

Sponsoring Agency: USSR. Glavnoye upravleniye gidrometeorologicheskoy sluzhby

Ed. (title page): D.L. Laykhtman, Doctor of Physical and Mathematical Sciences; Ed. (inside book): Yu.V. Vlasova; Tech. Ed.: A.N. Sergeyev

PURPOSE: This collection of articles is intended for scientists interested in the processes that take place in the boundary layer of the atmosphere.

COVERAGE: This publication contains 13 articles dealing with the physical processes of near-surface air masses. The research work was done in 1956. The basic work is related to the formation of hoarfrost and fog and to the effect of the condensation processes on thermal conditions. Some articles deal with the methods for measuring and computing the main meteorologic features of the near surface air masses, others with the problem of atmospheric turbulence. The articles are elucidated with charts, diagrams, and tables.

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Card 3/4

GORBUNOVA, I.G.; D'YACHKOVA, T.V.; SEROVA, N.V.

Some results of measuring thermophysical characteristics of soil under natural conditions. Trudy GGO no.77:79-83 '58.

(MIRA 12:4)

(Soil temperature)

GORBUNOVA, I.G.; SEROVA, N.V.

Thermophysical characteristics and moisture of soils. Trudy GGO no.107:44-46 '61. (MIRA 14:10)
(Soils--Thermal properties) (Soil moisture)

GORBUNOVA, I.G.

Some preliminary results of the calculation of irrigation conditions based on meteorological data. Trudy GGO no.144: 202-208 '63. (MIRA 17:6)

GORBUNOVA, I.O.

Preliminary results of studies in Voyeykovo of errors in measuring liquid precipitation. Trudy GGO no.175:132-142 '65.
(MIRA 18:8)

1. Glavnaya geofizicheskaya observatoriya im. A.I.Voyeykova, Leningrad.

ACC NR: AP7000284 (N) SOURCE CODE: UR/0050/66/000/011/0053/0057

AUTHOR: Struzer, L. R. (Candidate of physico-mathematical sciences); Golubev, V. S.; Gorbunova, I. G.

ORG: Main Geophysical Observatory (Glavnaya geofizicheskaya observatoriya); State Hydrological Institute (Gosudarstvennyy gidrologicheskiy institut)

TITLE: Preliminary results of precipitation-gage comparisons

SOURCE: Meteorologiya i gidrologiya, no. 11, 1966, 53-57

TOPIC TAGS: rain, atmospheric precipitation, rain gage, precipitation gage, pluviograph, snow, METEOROLOGIC INSTRUMENT

ABSTRACT: The preliminary results of rain-gage comparison tests run during 1963—1965 using the international reference precipitation gage (IRPG), Tret'yakov precipitation gages, rain gages with Nipher shields, and pluviographs are presented. The tests began on 1 July 1963 in Omsk and on 1 September 1963 at the rain-gage test range in Valday. Tabular data given in the article show that the relationship between the readings of the standard Soviet gages and of the IRPG is different for liquid and solid precipitation. The Tret'yakov gage registers 3% less than the IRPG for liquid precipitation and 3% more

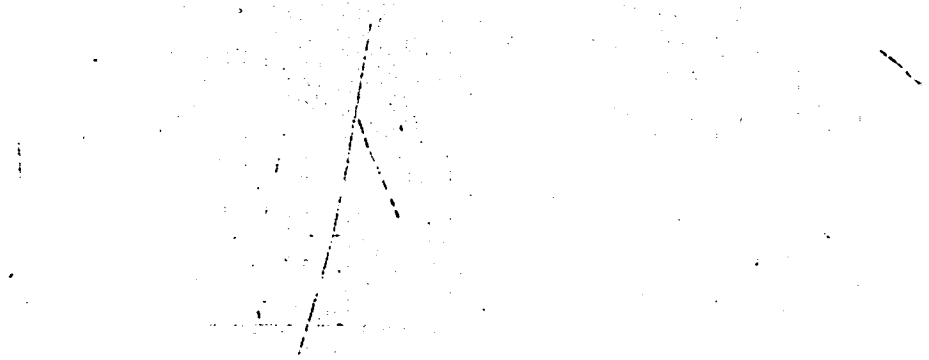
Card 1/2 UDC: 551.508.77

ACC NR: AP7000284

for solid. The rain gage with a Nipher shield registers the same or 1% more than the IRPG for liquid precipitation, and about 12% less for solid. Corrections for gage wetting and wind are also examined, and methods for converting the values obtained using Soviet rain gages to values obtained using a standard reference instrument are given. Orig. art. has: 4 figures, 2 tables, and 5 formulas. [LB]

[WA N-67-4]

SUB CODE: 04/ SUBM DATE: 29Dec65/ ORIG REF: 005/ OTH REF: 004



Card 2/2

GORBUNOVA, I. M. and N. A. ROKOTOVA

"The Influence of Small Doses of Ionizing Radiation on the State of Biological Objects."

report presented at the Conference on Influence of Ionizing Radiation upon the Higher Developed Parts of the Central Nerve System, Inst. of Higher Nervous Activity, AS USSR, 8-10 May 1958.

AUTHORS: Rokotova, N. A., Gorbunova, I. M. 20-119-5-57/59

TITLE: On Reflectory Changes in the Motor Activity of the Small Intestine Under the Influence of Chemical Stimulating Substances and of β-Rays Upon Its Mucous Membrane (O reflektornykh izmeneniyakh motoriki tonkogo kishechnika pri vozdeystvii na yego slizistuyu khimicheskikh razdrazhiteley i beta-luchey)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 5, pp. 1046 - 1049 (USSR)

ABSTRACT: Publications on this problem are very scarce (References 1,2). The authors in the present paper tried to investigate the reflectory reactions due to the stimulation of the mucous membrane on the basis of another, functionally nearer index, namely on the basis of the motor activity of the same portion of intestine. They used 32 cats for this. A portion 4-6 cm in length was separated from the small intestine, where vessels and nerves were spared. The portion of intestine was slit up in a longitudinal direction, inverted and the slit was sewn together. Solutions of acetylcholine, KCl, NaH_2PO_4 and alcohol of different concentrations were used for stimulation. After

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On Reflectory Changes in the Motor Activity of the Small Intestine Under the Influence of Chemical Stimulating Substances and of β-Rays Upon Its Mucous Membrane

30-60 seconds the rest of the stimulating substances was washed off the mucous membrane with a warm physiological sodium-chloride solution. The influence of the ionizing radiation was investigated by means of a flat applicator with P^{32}. Results: The animals were subjected to the experiments at different moments after feeding, therefore the motor activity of the intestine was different or entirely absent. Therefore the motions were caused by the intravenous introduction of sodium citrate. Some minutes later the above mentioned stimulation of the intestine was performed. This mostly led to an inhibition of the motions of intestine and to a pressor reaction upon the blood pressure. The reflectory nature of this inhibition is beyond doubt. The effect produced by the applicator with P^{32} was the same. There are 4 figures and 2 references, 2 of which are Soviet.

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Inst. Physiology im I. P. Pavlov AS USSR

AUTHORS: Gorbunova, I. M., Rokotova, N. A. SOV/20-120-4-65/67

TITLE: Conditioned Reflexes in Dogs Subjected to Local β-Irradiation of Strictly Limited Areas of Their Skins or Mucous Membranes (Uslovnyye refleksy u sobak pri mestnom beta-obluchenii ogranichennykh uchastkov kozhi ili slizistoy)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 4, pp. 922 - 925 (USSR)

ABSTRACT: As is known ionizing radiation (mainly referred to as X-rays) causes changes of the reflex activity under certain conditions (Refs 1-3, 7,8 and others). Most observations are concerned with a suppression of the reflex which lasts for several days after the irradiation. The direct causes of the reflex changes under certain conditions become unclear in the course of a long latent period. The investigations of this influence do not sufficiently clarify the mechanisms which are inserted in the realisation of the conditioned reaction reflex in the case of an influence of ionizing radiation. In the case of total irradiation the question cannot be answered whether the radiation exerts an influence on the receptors, conductors or centers.

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Furthermore the commonly applied doses damage various tissues and systems and lead to radiation diseases. The investigations were carried out with 3 dogs. They showed certain motoric nutritional reflexes. A small part of the skin of the animals' thighs or intestinal mucosa was irradiated with soft β-radiation. For this purpose a flat applicator of P^{32}- β-radiation was used. Thus those layers of the skin surface were irradiated where the receptor endings lie. All other tissues were not irradiated. The applied doses were selected in such a way (equivalent to 2 r) that no damages of tissue could be caused. From the results of the experiments the following conclusions may be drawn: 1) β-irradiation of mentioned intensity exerts an influence on the receptors of the skin or of the mucosa and changes the state of the conditioned reflex of the irradiated surface. 2) As a result of such an irradiation an irritation of the receptors takes place which in case of a repeated influence of a mechanical irritation passes into the state of hypoliminal inhibition (zapredel'noye). The influence of a locally applied β-irradiation upon the conditioned reflexes is directly caused by changed

reflexes of the irradiated surfaces. There are 4 figures and 9 references, 8 of which are Soviet.

ASSOCIATION: Institut fiziologii im.I.P.Pavlova Akademii nauk SSSR (Institute of Physiology imeni I.P.Pavlov AS USSR)

PRESENTED: January 29, 1958, by K.M.Bykov, Member, Academy of Sciences, USSR

SUBMITTED: January 29, 1958

1. Skin—Effects of radiation 2. Beta rays—Physiological effects 3. Intestine—Effects of radiation

GORBUNOVA, I.M.; ROKOTOVA, N.A.

Analysis of the mechanisms of distrubance of the conditioned reflex function of the central nervous system due to ionizing radiation. Trudy Inst.fiziol. 8:254-260 '59. (MIRA 13:5)

1. Laboratoriya nevro-fiziologicheskikh problem (zaveduyushchiy - K.M. Bykov [deceased] Instituta fiziologii im. I.P. Pavlova AN SSSR.

(CONDITIONED RESPONSE) (BETA RAYS--PHYSIOLOGICAL EFFECT)

ROKOTOVA, N.A.; GORBUNOVA, I.M.

Reflexogenic functions of iliofemoral veins. Fiziol.zhur. 45 no.9: 1110-1117 S '59. (MIRA 13:1)

1. Laboratoriya nevrofiziologicheskikh problem Instituta fiziologii im. I.P. Pavlova AN SSSR, Leningrad.
(BLOOD PRESSURE physiol.)
(ILIAC VEIN physiol.)
(FEMORAL VEIN physiol.)

ROKOTOVA, N.A.; GORBUNOVA, I.M.

Reflexogenic function of the femoroiliac veins. Fiziol.zhur. 46 no.1:71-77 Ja '60. (MIRA 13:5)

1. From the laboratory of neurophysiological problems, I.P. Pavlov Institute of Physiology, Leningrad.
(FEMORAL VEIN physiol.)
(ILIAC VENI physiol.)
(BLOOD PRESSURE physiol.)

L 11373-67 EWT(1) SCTB DD/GD

ACC NR: AT6036500 SOURCE CODE: UR/0000/66/000/000/0068/0069

AUTHOR: Bogina, I. D.; Gorbunova, I. M.; Rogovenko, Ye. S.; Rokotova, N. A.

ORG: none

26

TITLE: Psychophysiological characteristics of a sequence of movements in man [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 68-69

TOPIC TAGS: psychophysiology; space psychology, man machine communication

ABSTRACT: The problem of the present study was to obtain evidence of the creation of human internal criteria during action-sequence instruction and to observe the process of obeying these criteria. Tests took place on experimental panels with swiches and keys; subjects were instructed and then ordered to repeat various predetermined sequences which consisted of pressing and transferring the hand. The tests were conducted on healthy adult volunteers of both sexes aged 17—45, with intermediate or higher education.

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L 11373-67

ACC NR: AT6036500

In tests on 16 subjects, instruction for a sequence of 8 and 16 switch applications was studied (panel with 12 switches) using a search method and the free selection of each action from any three. During instruction it was noted that subjects choose the type of action sequence which occurs when the direction of hand transfer is constant. In tests on 75 subjects, it was found that the preceding direction of hand motion dictates the choice of the subsequent action.

Results of these tests indicate that the process of instructing action sequence is a process of choice and the development of internal criteria, which in these tests was the direction of motion of the hand over the panel.

In tests on 30 subjects, the execution rate of a preinstructed sequence of maneuvers using panel switches and the speed of hand percussion on a panel key were studied. It was found that the time required to execute one motor cycle in a free choice situation is maintained at a high level (mean error does not exceed 0.01 of the value of the mean relative error; $\frac{\sigma}{\bar{x}} \cdot 100$ fluctuates from 2—5%). Analysis of these data revealed a complete conformance with MacGill's model, which considers the

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ACC NR: AT6036500

operation of a mechanism generating a time interval. It was also observed that the fluctuation of intervals corresponds to fluctuations at the output of a system provided with feedback assuring error compensation.

These studies indicate that one internal criterion which controls action sequence is the time interval taken to complete a motor cycle and that a uniform speed of motion is associated with the process of conforming to this interval. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06, 05 / SUBM DATE: 00May66

Card 3/3

GORBUNOVA, I.V.

Detailed study of the seismicity of the northern Tien Shan. Trudy Inst. fiz. Zem. no.25:312-324 '62. (MIRA 15:11)
(Tien Shan--Seismometry)

DZHANUZAKOV, K.; GORBUNOVA, I.V.

The Son Kul' earthquake of October 13, 1958. Izv. AN Kir. SSR. Ser. est. i tekh. nauk 5 no.6:13-26 '63. (MIRA 17:5)

MASARSKIY, S.I.; GORBUNOVA, I.V.

Seismicity of Dzungaria and the Altai-Sayan area. Trudy Inst. fiz.Zem. no.32:94-137 '64. (MIRA 18:2)

GORBUNOVA, I.V.

Compiling maps of seismic activity with constant precision. Trudy Inst.fiz.Zem. no.32:138-147 '64.

Study of the seismic regime of the Dzungarian and northern Tien Shan zones. Ibid.:148-153 (MIRA 18:2)

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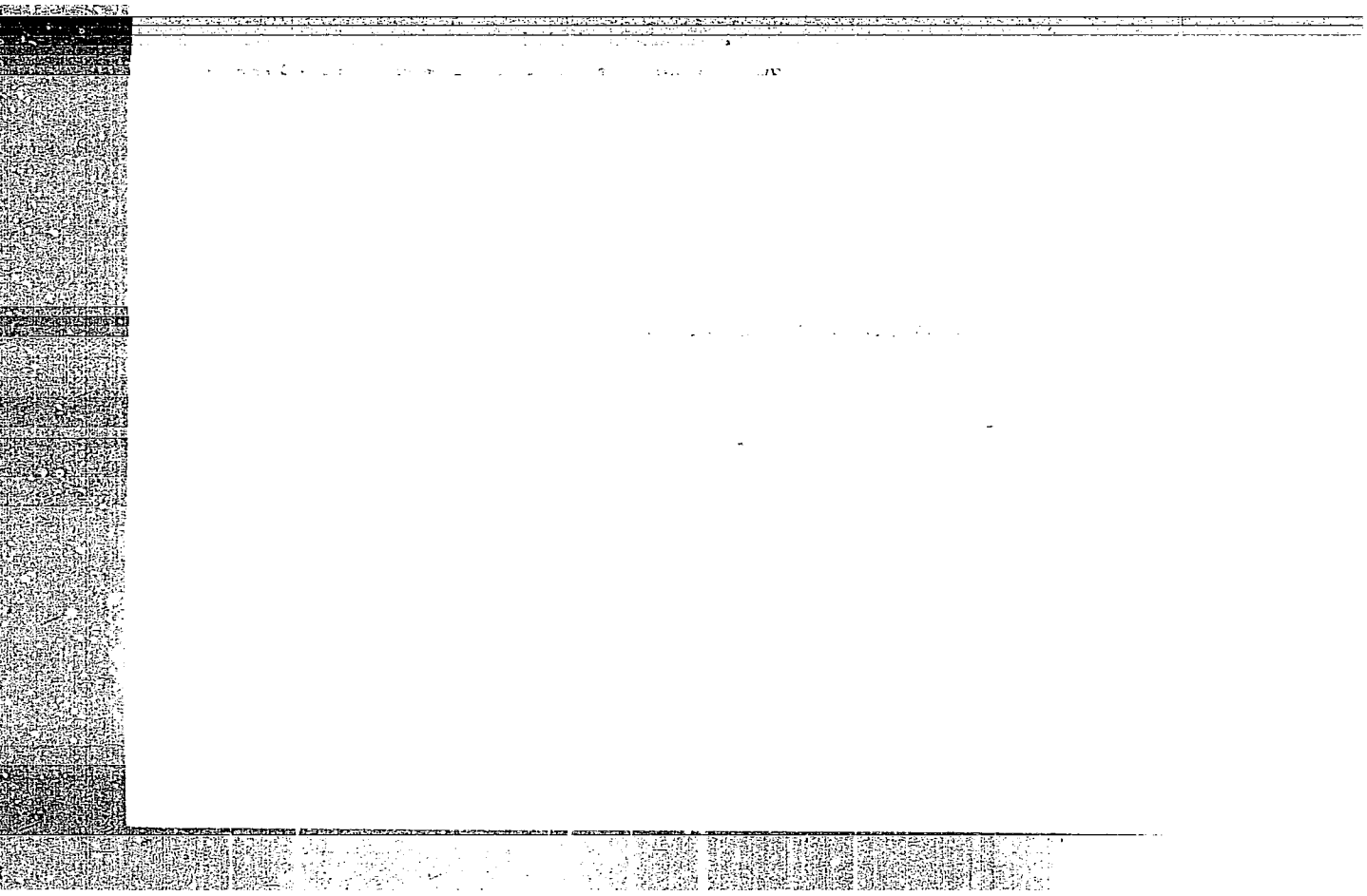

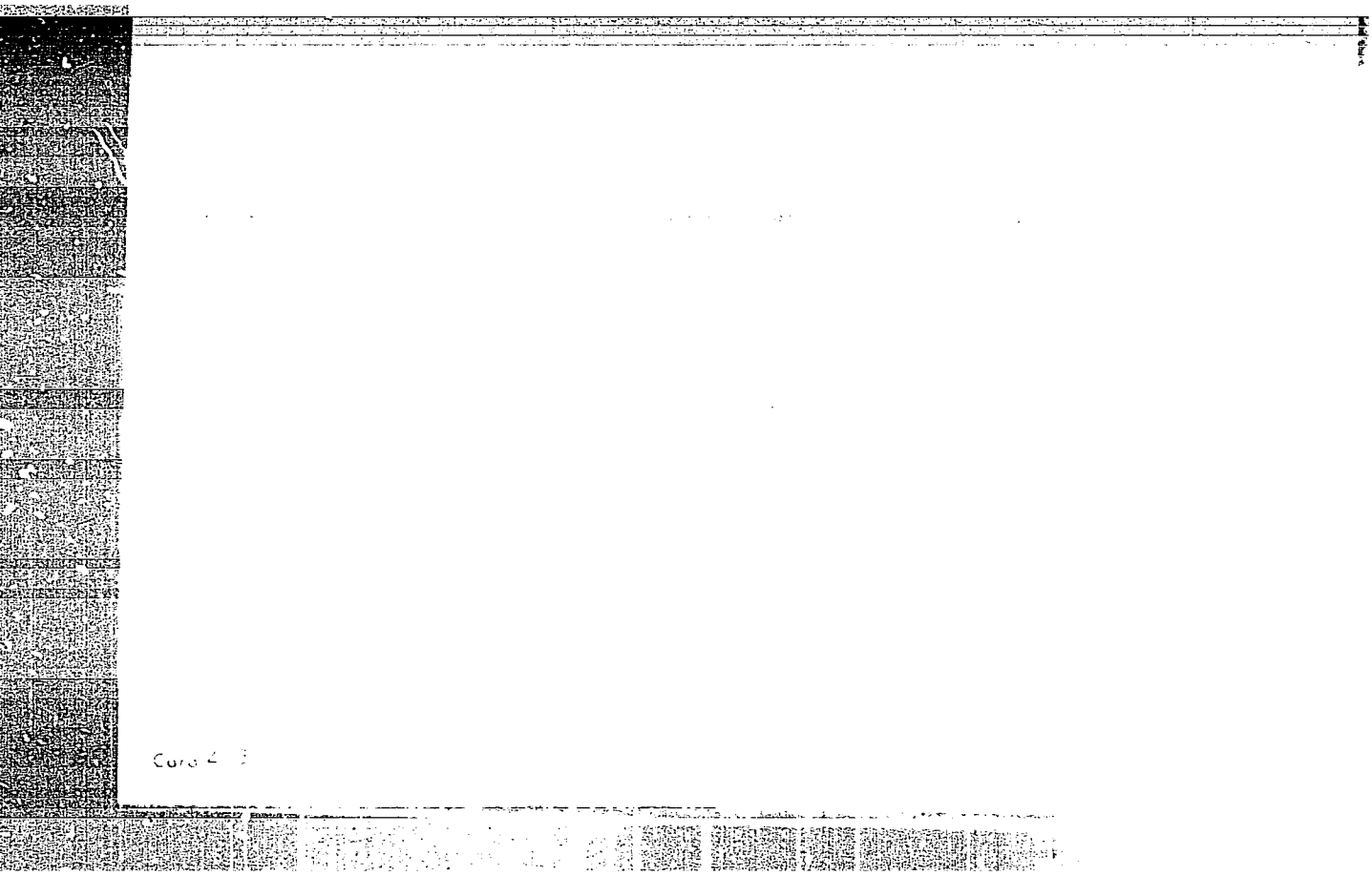

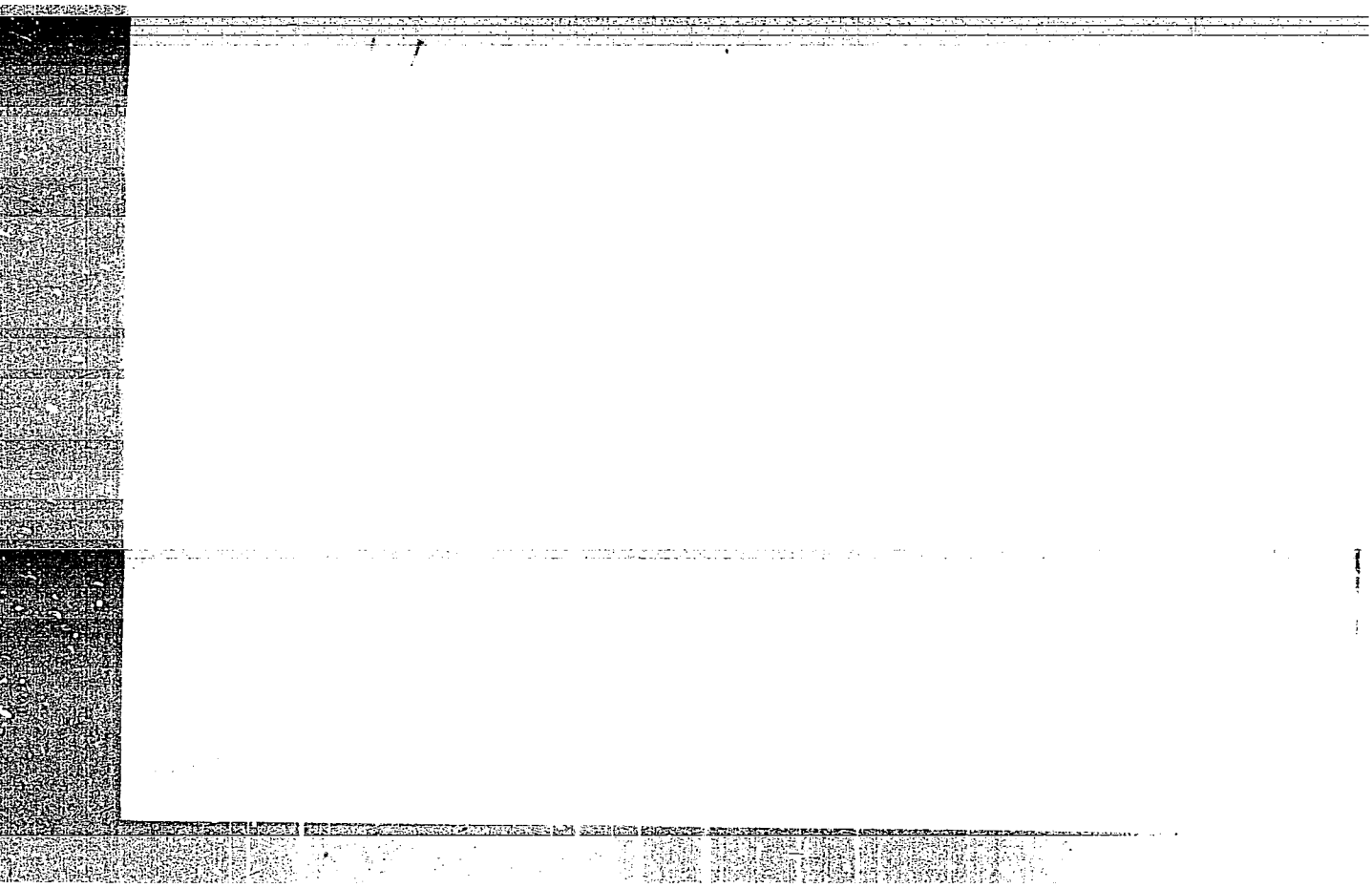

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YATSENKO, Ye.F.; DONTSOVA, G.M.; GORBUNOVA, I.Ye.

Physicochemical properties of petroleums in the new Carpathian fields. Trudy UkrNIGRI no.7:233-241 '63.
(MIRA 19:1)

GORBUNOVA, K. A. and MAKSIMOVICH, G. A.

"Burial Mounds in Molotov Province," Iz. Vses. geog. obshch., 84, No.4, 1952

GORBUNOVA, K. A.

USSR/Geology - Land formations

Card 1/1 : Pub. 86 - 28/38

Authors : Gorbunova, K. A.

Title : Karst hole

Periodical : Priroda 43/12, 114-115, Dec 1954

Abstract : A description is given of a sunken place in the earth's surface, known as a Karst hole, near the village of Kordon on the border between the Molotov and Sverdlov districts. The dimensions of the hole are given along with the form and character of the soil. Illustrations.

Institution: ..... Molotov State U. im. Gor'kiy

Submitted : .....

Gorbunova, K. A.

USSR/Geology - Ice formations

Card 1/1 Pub. 86 - 18/37

Authors : Maksimovich, G. A., Prof., and Gorbunova, K. A.

Title : Permafrost hillocks in the Molotov District

Periodical : Priroda 44/4, 102-103, Apr 1955

Abstract : A description is given of small raised areas existing on the surface of the ground between Sour lake and the mouth of the river Sylva. Borings were made in these hillocks in the summer time and they were found to contain ice. Observations were made of their change of form during the seasons, the disappearance of some of them and the formation of others with a view to determining their cause. Map; drawings.

Institution : ..... Molotov State U. im. Gor'kiy

Submitted : .....

GORBUNOVA, K. A.

14-1-344 D

Translation from: Referativnyy Zhurnal, Geografiya, 1957, Nr 1, p. 30 (USSR)

AUTHOR: Gorbunova, K. A.

TITLE: Karst in certain Regions of Molotovskaya Oblast' (Karst nekotorykh rayonov Molotovskoy oblasti)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Geological and Mineralogical Sciences, presented to Molotov University (Molotovsk. in-t) Mototov, 1956.

ASSOCIATION: Molotov University (Molotovsk.in-t)

Card 1/1

15-57-10-14723

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10, p 225 (USSR)

AUTHORS: Maksimovich, G. A., Gorbunova, K. A.

TITLE: Frozen Landscape Forms at the Village of Ust'-Kishert' in the Molotovskaya Oblast' (Merzlotnyye formy rel'yefa v s. Ust'-Kishert' Molotovskoy oblasti)

PERIODICAL: Uch. zap. Molotovsk. un-t, 1956, Vol 7, Nr 4, pp 51-58

ABSTRACT: The authors describe frozen burial mounds on the first terrace above the flood plain of the Sylva River, left bank, in the region of the village of Ust'-Kishert' in the Molotovskaya Oblast'. The most typical of the group (with embryonic forms) have been described. The origin is explained in the following manner. Ground-water flow, occurring at the base of the second terrace, feeds the mantling sandy clays of the first terrace in summer time. Beyond the area of the mounds this water enters a small stream, which limits the district on the north. In the wintertime, the bottom part of the stream, near

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Frozen Landscape Forms at the Village (Cont.)

the bed, freezes first, stopping seepage of water downward and forming a support for "perched" water. During freezing, the water migrates upward, the volume of the ground increases, and frost cracks develop in the surface of the first terrace at separate mounds. Subsequent freezing causes the mound to increase in height. It is noted that the area occupied by the mounds increased during the period from 1943 to 1946.

Card 2/2

G. A. Martynov

GORBUNOVA, K.A.

Formation of chemical composition of karst waters. Khim.geog. no.1:59-63 '61. (MIRA 16:3)
(Water, Underground--Analysis)

GORBUNOVA, K.A.

Chemical geography of rivers in Perm Province. Khim.geog. no.1: 93-98 '61. (MIRA 16:3)
(Perm Province--Rivers) (Perm Province--Geochemistry)

MAKSIMOVICH, G.A., prof., red.; BALKOV, V.A., dots., red.; VASIL'YEV, B.V., dots., red.; GORBUNOVA, K.A., dots., red.; MATVEYEV, B.K., dots., red.; MIKHAYLOV, G.K., inzh., red.; OBORIN, V.A., dots., red.; PECHERKIN, I.A., dots., red.; STARTSEV, V.S., dots., red.; SHIMANOVSKIY, L.A., inzh., red.

[Methods for studying karst; transactions] Metodika izucheniia karsta; trudy. Perm', Permskii gos. univ. Nos. 2, 4, 5, 10. 1963. (MIRA 17:12)

1. Vsesoyuznoye soveshchaniye po metodike izucheniya karsta.

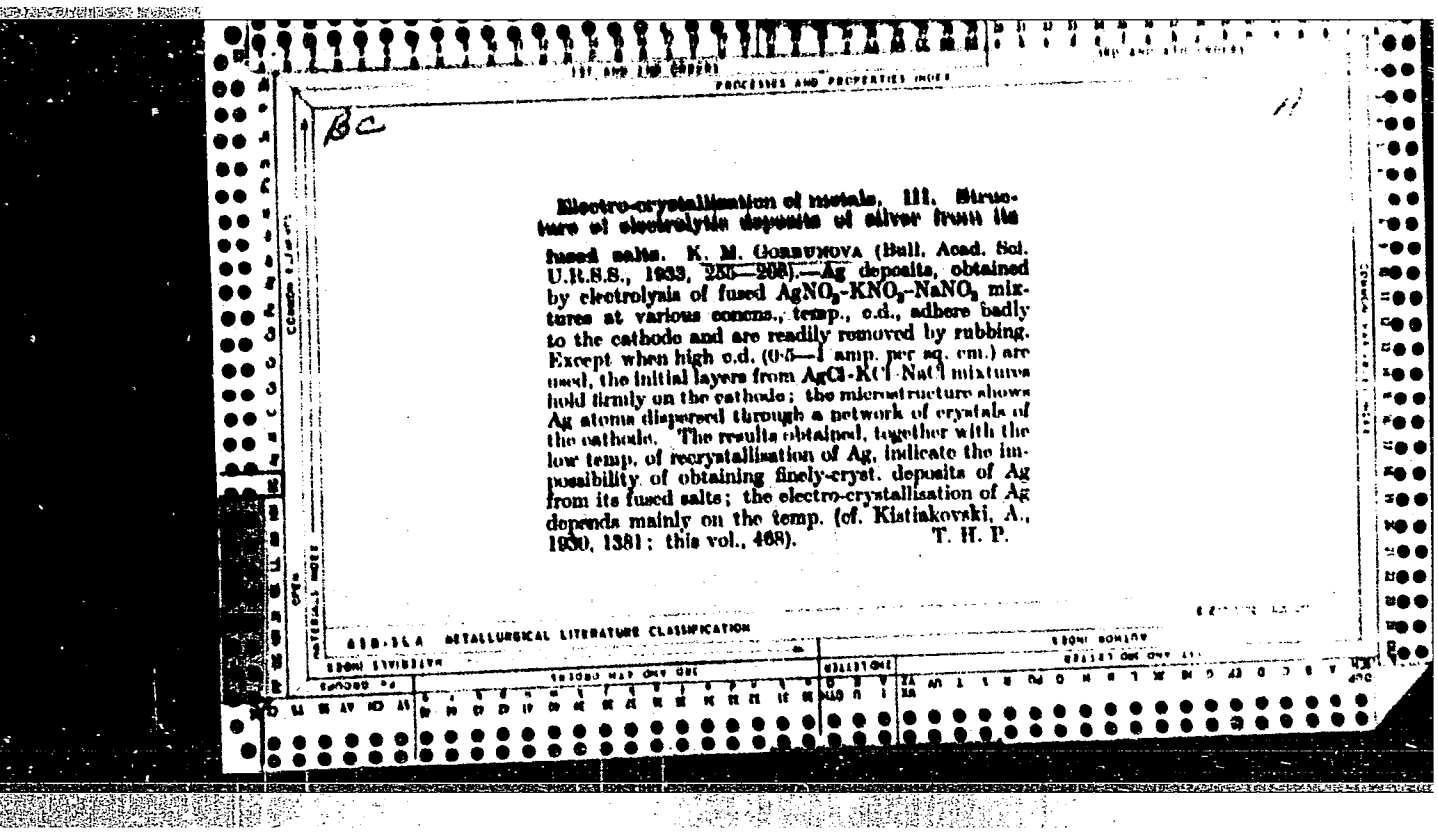
GORBUNOVA, K.A.

Karst holes and their sediments under the river beds. Peshchery no.3:79-90 '63. (MIRA 18:2)

Emil G. Racovita. Ibid.:103-104

MAKSIMOVICH, G.A.; GORBUNOVA, K.A.

Types of karst in the Urals. Trudy MOIP 15:33-41 '65.
(MIRA 18:9)

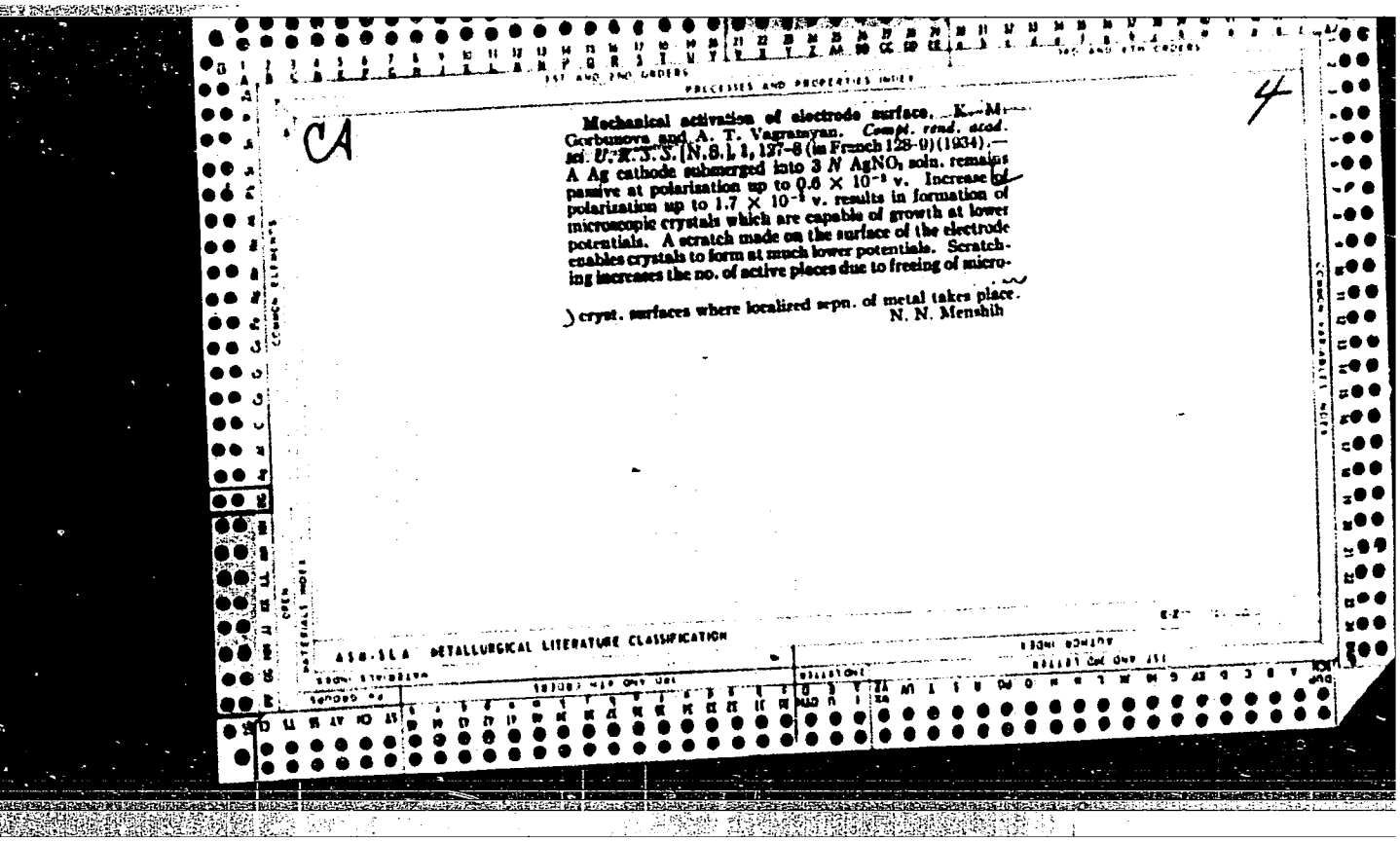


PROCESSES AND PROPERTIES INDEX

BC

Electro-crystallisation of metals. III. Structure of electrolytic deposits of silver from its fused salts. K. M. GORBUNOVA (Bull. Acad. Sci. U.R.S.S., 1933, 203—208).—Ag deposits, obtained by electrolysis of fused $AgNO_3$-KNO_3-$NaNO_3$ mixtures at various concns., temp., c.d., adhere badly to the cathode and are readily removed by rubbing. Except when high c.d. (0·5—1 amp. per sq. cm.) are used, the initial layers from AgCl-KCl-NaCl mixtures hold firmly on the cathode; the microstructure shows Ag atoms dispersed through a network of crystals of the cathode. The results obtained, together with the low temp. of recrystallisation of Ag, indicate the impossibility of obtaining finely-cryst. deposits of Ag from its fused salts; the electro-crystallisation of Ag depends mainly on the temp. (cf. Kistiakovski, A., 1930, 1381; this vol., 468). T. H. P.

669.3.5.A METALLURGICAL LITERATURE CLASSIFICATION

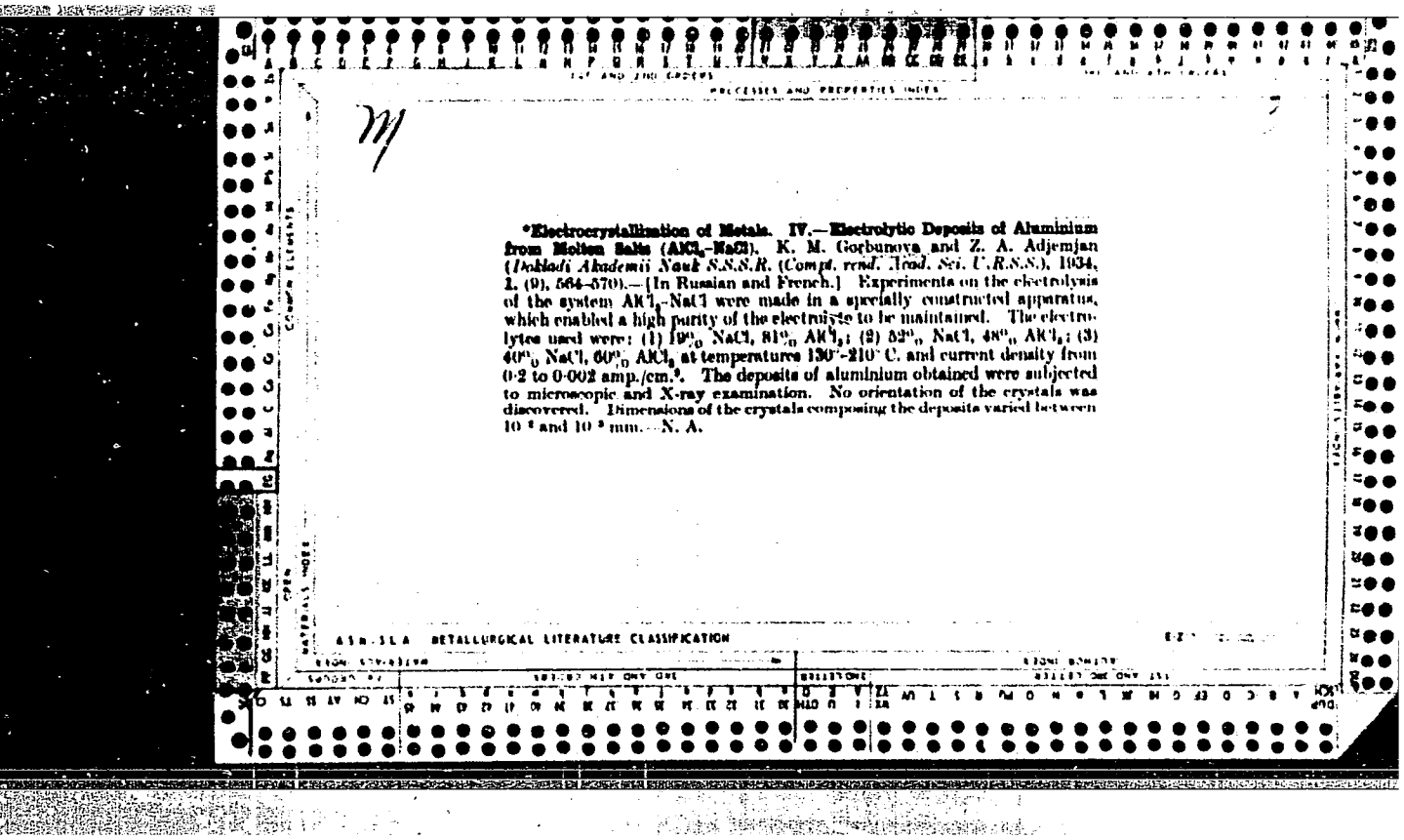


CA

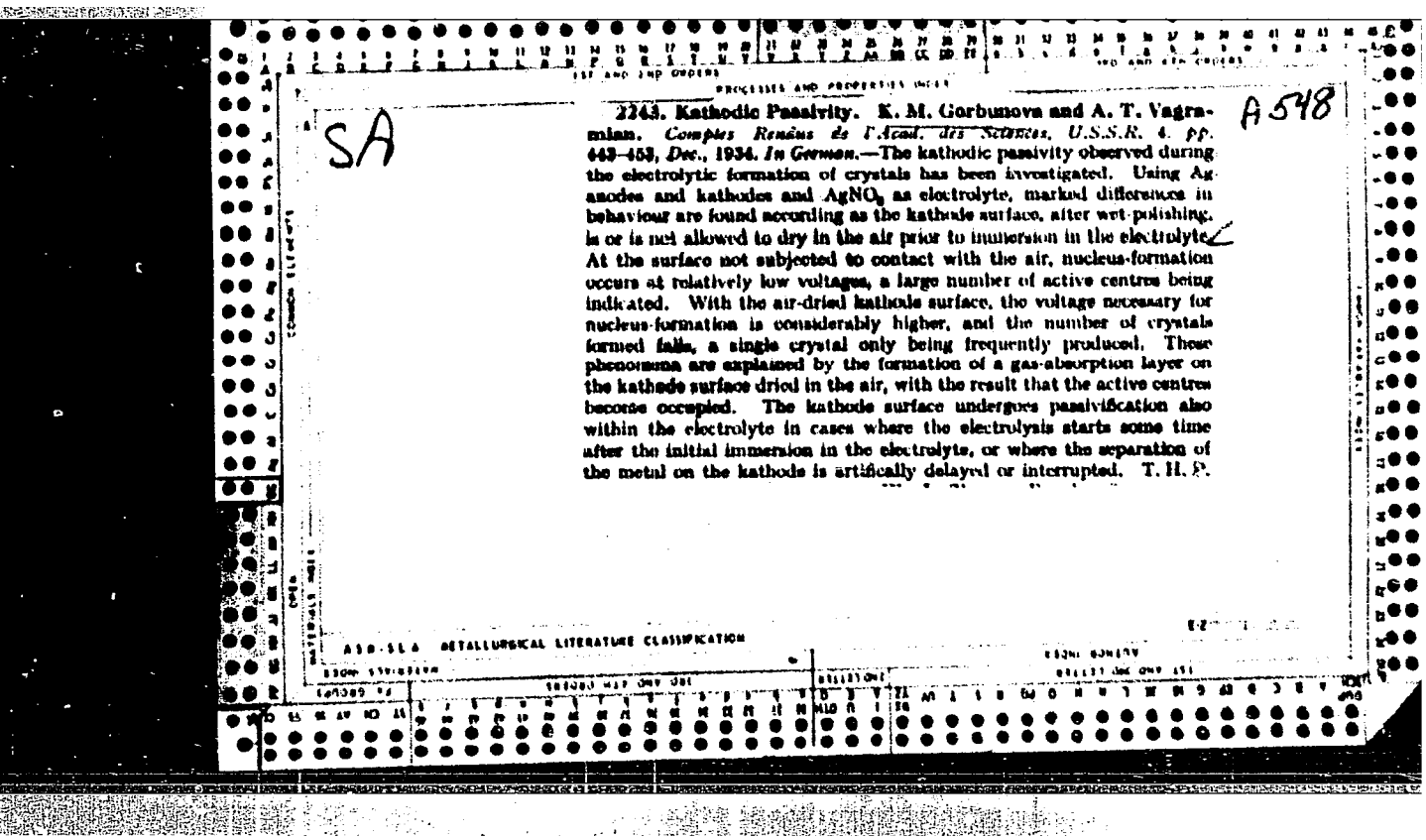
4

Mechanical activation of electrode surface. K. M. Gorbunova and A. T. Vagramyan. *Compt. rend. acad. sci. U.R.S.S.* [N.S.] 1, 127–8 (in French 128–9) (1934).—A Ag cathode submerged into 3 *N* $AgNO_3$ soln. remains passive at polarization up to 0.6×10^{-5} v. Increase of polarization up to 1.7×10^{-5} v. results in formation of microscopic crystals which are capable of growth at lower potentials. A scratch made on the surface of the electrode enables crystals to form at much lower potentials. Scratching increases the no. of active places due to freeing of micro-cryst. surfaces where localized srpn. of metal takes place.
N. N. Menshih

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



***Electrocrystallisation of Metals. IV.—Electrolytic Deposits of Aluminium from Molten Salts ($AlCl_3$–NaCl).** K. M. Gorbunova and Z. A. Adjemjan (*Dokladi Akademii Nauk S.S.S.R.* (*Compt. rend. Acad. Sci. U.R.S.S.*), 1934, 1, (9), 564–570).—[In Russian and French.] Experiments on the electrolysis of the system $AlCl_3$–NaCl were made in a specially constructed apparatus, which enabled a high purity of the electrolyte to be maintained. The electrolytes used were: (1) 19% NaCl, 81% $AlCl_3$; (2) 52% NaCl, 48% $AlCl_3$; (3) 40% NaCl, 60% $AlCl_3$ at temperatures 130°–210° C. and current density from 0·2 to 0·002 amp./cm.^{2}. The deposits of aluminium obtained were subjected to microscopic and X-ray examination. No orientation of the crystals was discovered. Dimensions of the crystals composing the deposits varied between 10^{-2} and 10^{-3} mm.—N. A.



SA

A 548

2243. Kathodic Passivity. K. M. Gorbunova and A. T. Vagramian. *Comptes Rendus de l'Acad. des Sciences, U.S.S.R.* 4. pp. 449–453, *Dec.*, 1934. *In German.*—The kathodic passivity observed during the electrolytic formation of crystals has been investigated. Using Ag anodes and kathodes and $AgNO_3$ as electrolyte, marked differences in behaviour are found according as the kathode surface, after wet-polishing, is or is not allowed to dry in the air prior to immersion in the electrolyte. At the surface not subjected to contact with the air, nucleus-formation occurs at relatively low voltages, a large number of active centres being indicated. With the air-dried kathode surface, the voltage necessary for nucleus-formation is considerably higher, and the number of crystals formed falls, a single crystal only being frequently produced. These phenomena are explained by the formation of a gas-absorption layer on the kathode surface dried in the air, with the result that the active centres become occupied. The kathode surface undergoes passivification also within the electrolyte in cases where the electrolysis starts some time after the initial immersion in the electrolyte, or where the separation of the metal on the kathode is artifically delayed or interrupted. T. H. P.

A50-SL4 METALLURGICAL LITERATURE CLASSIFICATION